

the rotor and positioned with the rotor magnets offset axially outwardly (or inwardly) of the stator magnets to allow a force balance to be achievable to bear axial thrust. An electrically energizable coil modulates magnetic flux between the respective stator and rotor magnets for each combination. A first electrical circuit regulates electrical energy to the coils for maintaining a reference position of the rotor. A second electrical circuit compares feed-back of electrical energy to at least one of the coils with a reference electrical energy of about zero amps or volts and integrates the differences until the difference is about zero to provide a signal to modify the reference position, whereby to attain a zero force balance position wherein the current which must be supplied to the coils may be reduced to near zero.

In the Claims:

Please amend the claims as follows:

Claim 1 (amended). Apparatus comprising a rotor, a stator, first and second axially spaced combinations each including at least one permanent magnet disposed on each of said rotor and said stator on opposite sides of a respective axially extending gap portion and polarized to levitate said rotor and further including an electrically energizable coil for modulating magnetic flux between said respective stator and rotor magnets, electrical circuitry for regulating electrical energy to said coils for stabilizing said rotor axially, and said rotor magnets being offset axially of said stator magnets respectively such that said rotor magnets are offset axially inwardly of said corresponding stator magnets or such that said rotor magnets are offset axially outwardly of said corresponding stator magnets.

Claim 15 (amended). Apparatus comprising a rotor, a stator,

first and second axially spaced combinations each including at least one permanent magnet disposed on each of said rotor and said stator on opposite sides of a respective axially extending gap portion and polarized to levitate said rotor and further including an electrically energizable coil for modulating magnetic flux between said respective stator and rotor magnets, a first electrical circuit for regulating electrical energy to said coils for maintaining a reference position of said rotor, and a second electrical circuit responsive to feed-back of electrical energy to at least one of said coils for modifying said reference position.

Claim 20 (amended). A method for bearing a rotor comprising providing first and second axially spaced combinations each including at least one permanent magnet disposed on each of the rotor and a stator on opposite sides of a respective axially extending gap portion and polarized to levitate the rotor, providing an electrically energizable coil for each of the combinations, regulating electrical energy to the coils for maintaining a reference position of the rotor, and modifying, in response to feed-back of electrical energy to at least one of the coils, the reference position.

REMARKS

Attached hereto is a marked-up version of the changes made to the claims by the current Amendment. The attached page is captioned **"Version with Markings to Show Changes Made."**

An Information Disclosure Statement was mailed November 28, 2001. Enclosed is a copy thereof and of the form 1449 which was enclosed therewith. It is respectfully requested that the Examiner consider the additional references disclosed therein.

The Abstract has been amended as required by the Examiner